WE CLAIM:

1. A method for modifying the impedance of a semiconductor component, said semiconductor component comprising

a first conductive region defining a laid down base conductive path, said first conductive region comprising a first link member and a second link member, said first region having a heat modifiable dopant profile

and

a second region contiguous with the first region, said second region having a dopant profile rendering said second region non-conductive relative to said first region,

said first and second link members being disposed in juxtaposition such that said first and second link members are separated by a gap region defined by said second region, said second region having a heat modifiable dopant profile, at least with respect to said gap region,

said method comprising applying a bridging cycle to one or more preselected bridging areas,

each said bridging area comprising a gap region component comprising at least a portion of the gap region, a first link component comprising at least a portion of said first link member, and a second link component comprising at least a portion of said second link member,

so as to form a discrete conductive bridge across said gap region connecting said first link member and said second link member,

said bridging cycle comprising applying one or more heating/cooling treatments to one or more preselected target areas of a bridging area, each heating/cooling treatment comprising

directing a focused heating source to melt a preselected target area of a bridging area so as to thereby alter the dopant profile of the melted preselected target area

and

allowing said melted preselected target area to solidify with an altered dopant profile.

2. A method as defined in claim 1 wherein a bridging cycle, when a preselected target area comprises the gap region component and one of said first and second link components of a bridging area, comprises applying a heating/cooling treatment to such preselected target area and applying one or more other heating/cooling treatments to one or more preselected target areas of the bridging area so as to form thereby said discrete conductive bridge.

3. A method as defined in claim 1 comprising a bridging cycle which comprises applying two or more of said heating/cooling treatments to respective preselected target areas of a bridging area so as to form thereby said discrete conductive bridge, and wherein one of said preselected target areas is a first area which comprises the gap region component and one of said first and second link components, and another of said preselected target areas is a second area which comprises the gap region component and the other of said first and second link components, said first and second areas overlapping one another.

4. A method as defined in claim 1 wherein a bridging cycle, when a preselected target area comprises a bridging area, comprises applying a heating/cooling treatment to the bridging area so as to form thereby said discrete conductive bridge.

5. A method as defined in claim 1 wherein a bridging cycle, when a preselected target area comprises a bridging area, comprises applying a heating/cooling treatment to the bridging area so as to form thereby said discrete conductive bridge and wherein said bridging cycle comprises applying two or more of said heating/cooling treatments to said bridging area so as to form thereby said discrete conductive bridge.

6. A method as defined in claim 1 further including the steps of

a) determining the impedance of said semiconductor component subsequent to a bridging cycle and

b) comparing the impedance obtained from step a) with a predetermined impedance

and

c) if necessary, repeating, at one or more additional preselected bridging areas, said bridging cycle, until said predetermined impedance is achieved, each bridging cycle being applied to a different preselected bridging area so as to form a respective discrete conductive bridge.

7. A method as defined in claim 4 further including the steps of

a) determining the impedance of said semiconductor component subsequent to a bridging cycle and

b) comparing the impedance obtained from step a) with a predetermined impedance

and

c) if necessary, repeating, at one or more additional preselected bridging areas, said bridging cycle, until said predetermined impedance is achieved, each bridging cycle being applied to a different preselected bridging area so as to form a respective discrete conductive bridge.

8. A method as defined in claim 1 wherein said first conductive region comprises a conductive crimp element defining said laid down base conductive path, said crimp element comprising said first link member and said second link member.

9. A method for modifying the impedance of a semiconductor component, said semiconductor component comprising

a first conductive region comprising a first conductive link member and a second link member, said first region having a heat modifiable dopant profile, said first conductive link member defining a laid down base conductive path

and

a second region contiguous with the first region, said second region having a dopant profile rendering said second region non-conductive relative to said first region,

said first and second link members being disposed in juxtaposition such that said first and second link members are separated by a gap region defined by said second region, said second region having a heat modifiable dopant profile, at least with respect to said gap region,

said method comprising applying a bridging cycle to one or more preselected bridging areas,

each said bridging area comprising a gap region component comprising at least a portion of the gap region, a first link component comprising at least a portion of said first link member, and a second link component comprising at least a portion of said second link member,

so as to form a discrete conductive bridge across said gap region connecting said first link member and said second link member,

said bridging cycle comprising applying one or more heating/cooling treatments to one or more preselected target areas of a bridging area, each heating/cooling treatment comprising

directing a focused heating source to melt a preselected target area of a bridging area so as to thereby alter the dopant profile of the melted preselected target area

and

allowing said melted preselected target area to solidify with an altered dopant profile.

10. A method as defined in claim 8 wherein a bridging cycle, when a preselected target area comprises the gap region component and one of said first and second link components of a bridging area, comprises applying a heating/cooling treatment to such preselected target area and applying one or more other heating/cooling treatments to one or more preselected target areas of the bridging area so as to form thereby said discrete conductive bridge.

11. A method as defined in claim 9 comprising a bridging cycle which comprises applying two or more of said heating/cooling treatments to respective preselected target areas of a bridging area so as to form thereby said discrete conductive bridge, and wherein one of said preselected target areas is a first area which comprises the gap region component and one of said first and second link components, and another of said preselected target areas is a second area which comprises the gap region component and the other of said first and second link components, said first and second areas overlapping one another.

12. A method as defined in claim 9 wherein a bridging cycle, when a preselected target area comprises a bridging area, comprises applying a heating/cooling treatment to the bridging area so as to form thereby said discrete conductive bridge.

13. A method as defined in claim 9 wherein a bridging cycle, when a preselected target area comprises a bridging area, comprises applying a heating/cooling treatment to the bridging area so as to form thereby said discrete conductive bridge and wherein said bridging cycle comprises applying two or more of said heating/cooling treatments to said bridging area so as to form thereby said discrete conductive bridge.

14. A method as defined in claim 9 further including the steps of

a) determining the impedance of said semiconductor component subsequent to a bridging cycle and

b) comparing the impedance obtained from step a) with a predetermined impedance

and

c) if necessary, repeating, at one or more additional preselected bridging areas, said bridging cycle, until said predetermined impedance is achieved, each bridging cycle being applied to a different preselected bridging area so as to form a respective discrete conductive bridge.

15. A method as defined in claim 12 further including the steps of

a) determining the impedance of said semiconductor component subsequent to a bridging cycle and

b) comparing the impedance obtained from step a) with a predetermined impedance

and

c) if necessary, repeating, at one or more additional preselected bridging areas, said bridging cycle, until said predetermined impedance is achieved, each bridging cycle being applied to a different preselected bridging area so as to form a respective discrete conductive bridge.

16. An impedance tunable semiconductor component, said semiconductor component comprising

a first conductive region defining a laid down base conductive path, said first conductive region comprising a first link member and a second link member, said first region having a heat modifiable dopant profile

and

a second region contiguous with the first region, said second region having a dopant profile rendering said second region non-conductive relative to said first region,

said first and second link members being disposed in juxtaposition such that said first and second link portions are separated by a gap region defined by said second region, said second region having a heat modifiable dopant profile, at least with respect to said gap region.

17. An impedance tunable semiconductor component as defined in claim 16 wherein, said first conductive region comprises a conductive crimp element defining said laid down base conductive path, said crimp element comprising said first link member and said second link member.

18. An impedance tunable semiconductor component, said semiconductor component comprising

a first conductive region comprising a first conductive link member and a second link member, said first region having a heat modifiable dopant profile, said first conductive link portion defining a base conductive path

and

a second region contiguous with the first region, said second region having a dopant profile rendering said second region non-conductive relative to said first region,

said first and second link members being disposed in juxtaposition such that said first and second link portions are separated by a gap region defined by said second region, said second region having a heat modifiable dopant profile, at least with respect to said gap region.

19. A method as defined in claim 5 further including the steps of

a) determining the impedance of said semiconductor component subsequent to a bridging cycle and

b) comparing the impedance obtained from step a) with a predetermined impedance

and

c) if necessary, repeating, at one or more additional preselected bridging areas, said bridging cycle, until said predetermined impedance is achieved, each bridging cycle being applied to a different preselected bridging area so as to form a respective discrete conductive bridge.